~~Patent Claims~~ What Is Claimed Is:

1. A fuel injector (100), in particular an injector for fuel injection systems of internal combustion engines, having a valve-closure member (7) that is actuated by a valve needle (5), the valve-closure member cooperating with a fixed valve seat surface (6) to form a sealing seat, having a connecting piece (1), and having a valve housing (20) that at least partially encloses the connecting piece (1), the valve housing being joined to the connecting piece (1) by a crimped connection,
characterized in that the connecting piece (1) has at least one notch (40) and that the valve housing (20), axially stressed, is crimped into the notch (40).

2. The fuel injector as recited in Claim 1,
characterized in that the notch (40) is configured as a circumferential groove (40) on the external periphery of the connecting piece (1).

3. A fuel injector, in particular an injector for fuel injection systems of internal combustion engines, having a valve-closure member (7) that is actuated by a valve needle (5), the valve-closure member cooperating with a fixed valve seat surface (6) to form a sealing seat, having a connecting piece (1) and having a valve housing (20) that at least partially encloses the connecting piece (1), the valve housing being joined to the connecting piece (1) by a crimping connection,
characterized in that, for acting upon the crimping connection through an axial stressing force, a spring element (61) is provided between the valve housing (20) and the connecting piece (1).

4. The fuel injector as recited in Claim 3,
characterized in that a support ring (62) is provided between the spring element (61) and a crimped valve housing segment (65, 66a - 66e).

5. The fuel injector as recited in Claim 3 or 4,
characterized in that the spring element (61) is configured as a spring ring.

6. The fuel injector as recited in one of Claims 1 through 5,

characterized in that the crimping connection has a plurality of crimping segments (66a-66e), which, with regard to a valve axis (67), are arranged so as to be offset from each other circumferentially, and in which the valve housing (20) is joined to the connecting piece (1) in each case by a partial crimped connection, leaving out the uncrimped segments (68a-68d).

7. The fuel injector as recited in one of Claims 1 through 6,
characterized in that a lift-adjustment disk (46) is provided between the valve housing (20) and the connecting piece (1).

8. The fuel injector as recited in one of Claims 1 through 7,
characterized in that a sealing ring (42) is provided between the valve housing (20) and the connecting piece (1).

9. A method for manufacturing a fuel injector, in particular an injector for fuel injection systems of internal combustion engines, having a valve-closure member (7) that is actuated by a valve needle (5), the valve-closure member cooperating with a fixed valve seat surface (6) to form a sealing seat, having a connecting piece (1) and having a valve housing (20) that at least partially encloses the connecting piece (1), the connecting piece (1) having at least one notch (40), into which the valve housing (20) is crimped,
having the following method steps:
inserting the connecting piece (1) into the valve housing (20) up to a predetermined limit stop (44), and
crimping a material bulge (70) into the notch (40), the material bulge having an average distance (d) with respect to the notch (40) in order to generate an axial tension between valve housing (20) and the connecting piece (1).

10. A method for manufacturing a fuel injector, in particular an injector for fuel injection systems of internal combustion engines, having a valve-closure member (7) that is actuated by a valve needle (5), the valve-closure member cooperating with a fixed valve seat surface (6) to form a sealing seat, having a connecting piece (1) and having a valve housing (20) that at least partially encloses the connecting piece (1),
having the following method steps:
inserting the connecting piece (1) into the valve housing (20) up to a predetermined limit stop

(44),

introducing a spring element (61) into an interstitial space (60) formed between the connecting piece (1) and the valve housing (20), and

applying a crimping force to the spring element (61) by crimping over the valve housing (20) in the direction of the connecting piece (1) in order to generate an axial tension between the valve housing (20) and the connecting piece (1).

11. The method as recited in Claim 10,

characterized in that, once the spring element (61) is introduced, the following additional method steps are provided:

inserting a support ring (62) into the interstitial space (60) formed, after the joining, between the connecting piece (1) and the valve housing (20).

12. The method as recited in Claim 10 or 11,

characterized in that the spring element (61) is prestressed before the crimping by the action of a tubular prestressing tool guided about the connecting piece (1).

13. The method as recited in one of Claims 9 through 12,

characterized in that an axial insertion depth of the connecting piece (1) into the valve housing (20) is set by least one lift-adjustment disk (46).

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